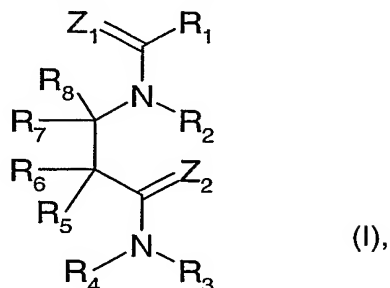


What is claimed is:

## 1. A compound of the formula



in which

$Z_1$  is an oxygen atom; or a sulfur atom;

$Z_2$  is an oxygen atom; or a sulfur atom;

$R_1$  is an aryl or heteroaryl group, which is unsubstituted or substituted;

$R_2$  is hydrogen; or an organic substituent;

$R_3$  is hydrogen; or an organic substituent;

$R_4$  is hydrogen; or an organic substituent;

or  $R_3$  and  $R_4$ , taken together, form, together with the nitrogen atom, to which they are attached, a ring, which is unsubstituted or substituted;

$R_5$  is hydrogen; or an unsubstituted or substituted alkyl group; or forms, taken together with  $R_8$  or with a monovalent substituent attached to that atom of  $R_6$ , via which atom  $R_6$  is directly connected with the carbon atom, shown in the formula I, which carries  $R_5$ , one additional bond;

$R_6$  and  $R_7$ , taken together, form, together with the two carbon atoms, shown in the formula I, to which atoms they are attached, a bicyclic ring system, which ring system is carbocyclic or heterocyclic, which ring system is substituted, in the manner shown in the formula I, by the four substituents  $-N(R_2)-C(=Z_1)-R_1$ ,  $-C(=Z_2)-N(R_3)-R_4$ ,  $R_5$  and  $R_8$ , and which ring system is optionally further substituted;

and  $R_8$  is hydrogen; or an unsubstituted or substituted alkyl group; or forms, taken together with  $R_5$  or with a monovalent substituent attached to that atom of  $R_7$ , via which atom  $R_7$  is directly connected with the carbon atom, shown in the formula I, which carries  $R_8$ , one additional bond,

or, where appropriate, a tautomer thereof, in each case in free form or in salt form.

2. A compound according to claim 1 of the formula I, in which Z<sub>1</sub> is an oxygen atom, or, where appropriate, a tautomer thereof.
3. A compound according to claim 1 of the formula I, in which Z<sub>2</sub> is an oxygen atom, or, where appropriate, a tautomer thereof.
4. A compound according to claim 1 of the formula I, in which R<sub>1</sub> is a phenyl, pyridyl or pyrazolyl group, which is unsubstituted or substituted, or, where appropriate, a tautomer thereof.
5. A compound according to claim 4 of the formula I, in which R<sub>1</sub> is a pyrazol-5-yl group, which is substituted in the 3-position by halogen, halo-C<sub>1</sub>-C<sub>6</sub>alkyl or halo-C<sub>1</sub>-C<sub>6</sub>alkoxy and in the 1-position by a pyrid-2-yl group, which group is substituted in the 3-position by chlorine or bromine, or, where appropriate, a tautomer thereof.
6. A compound according to claim 1 of the formula I, in which R<sub>2</sub> is hydrogen or C<sub>1</sub>-C<sub>6</sub>alkyl, or, where appropriate, a tautomer thereof.
7. A compound according to claim 1 of the formula I, in which R<sub>3</sub> is hydrogen or C<sub>1</sub>-C<sub>6</sub>alkyl, or, where appropriate, a tautomer thereof.
8. A compound according to claim 1 of the formula I, in which R<sub>4</sub> is C<sub>1</sub>-C<sub>6</sub>alkyl, or, where appropriate, a tautomer thereof.
9. A compound according to claim 1 of the formula I, in which R<sub>5</sub> and R<sub>8</sub>, taken together, are a bond, or, where appropriate, a tautomer thereof.
10. A compound according to claim 1 of the formula I, in which the two carbon atoms, shown in the formula I, to which atoms R<sub>6</sub> and R<sub>7</sub> are attached, are two ring members of an aromatic ring, or, where appropriate, a tautomer thereof.
11. A pesticidal composition, which comprises at least one compound according to claim 1 of the formula I or, where appropriate, a tautomer thereof, in each case in free form or in agrochemically utilizable salt form, as active ingredient and at least one auxiliary.

12. A composition according to claim 11 for controlling insects or representatives of the order Acarina.

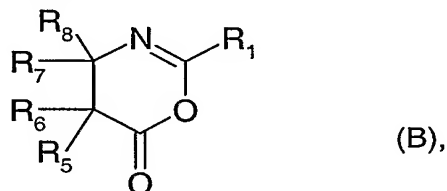
13. A method for controlling pests, which comprises applying a composition according to claim 11 to the pests or their environment.

14. A method according to claim 13 for controlling insects or representatives of the order Acarina.

15. A method according to claim 13 for the protection of plant propagation material from the attack by pests, which comprises treating the propagation material or the site, where the propagation material is planted.

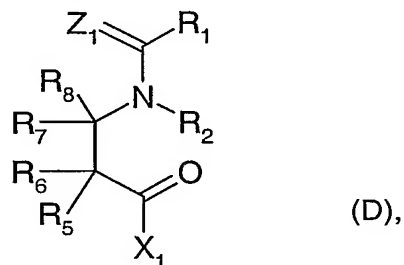
16. Plant propagation material treated in accordance with the method described in claim 15.

17. A compound of the formula B



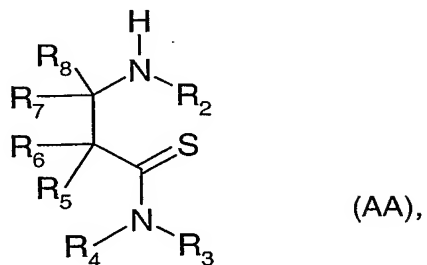
in which R<sub>1</sub>, R<sub>5</sub>, R<sub>6</sub>, R<sub>7</sub> and R<sub>8</sub> have the meanings given in claim 1 for the formula I, or, where appropriate, a tautomer thereof, in each case in free form or in salt form.

18. A compound of the formula D



in which Z<sub>1</sub>, R<sub>1</sub>, R<sub>2</sub>, R<sub>5</sub>, R<sub>6</sub>, R<sub>7</sub> and R<sub>8</sub> have the meanings given in claim 1 for the formula I; and R is OH, C<sub>1</sub>-C<sub>4</sub>alkoxy or Cl, or, where appropriate, a tautomer thereof, in each case in free form or in salt form.

19. A compound of the formula AA



in which  $R_2$ ,  $R_3$ ,  $R_4$ ,  $R_5$ ,  $R_6$ ,  $R_7$  and  $R_8$  have the meanings given in claim 1 for the formula I, or, where appropriate, a tautomer thereof, in each case in free form or in salt form.